

REMARKS

Summary of the Office Action

Claims 1, 2, 4, 6, and 13 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kodera et al. (US Pat. No. 6,195,149) in view of Hadoka et al. (JP 09-325328).

Claims 5, 8, 9, 11, 14, and 15 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kodera et al. in view of Hadoka et al., further in view of Shiraishi. (US Pat. No. 6,864,947).

Claims 3 and 7 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Kodera et al. in view of Hadoka et al., further in view of Nakahara et al. (US Pat. No. 6,239,855).

Claims 10 and 12 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kodera et al. in view of Hadoka et al. and Shiraishi, and further in view of Nakahara et al.

Summary of the Response to the Office Action

Independent claims 1 and 8 have been amended to incorporate features from their dependent claims. Claims 2, 14, and 15 have been cancelled as their features have been incorporated into their respective independent claims. Claims 3 and 5 have been amended to change their dependencies from canceled claim 2 to independent claim 1. New claims 16 and 17 have been added. Claims 1-17 are pending in this application.

At least independent claim 1 does not raise any new issues as claim 1 merely incorporates finally rejected dependent claims 2 and 14, both of which were sequentially dependent on claim 1. Similarly, independent claim 8 has been amended to at least incorporate dependent claim 15. Lastly, new independent claim 16 incorporates the allowable subject matter of dependent claims 14 and 15, now canceled after being incorporated into their respective independent claims.

As no new matter has been entered and corresponding number of finally rejected claims have been canceled to make room for the new claims, Applicants respectfully request that the present amendment be entered and reconsidered based on the following remarks.

All Claims Comply With §103

Claims 1, 2, 4, 6, and 13 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kodera et al. in view of Hadoka et al., claims 5, 8, 9, 11, 14, and 15 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kodera et al. in view of Hadoka et al., further in view of Shiraishi., claims 3 and 7 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Kodera et al. in view of Hadoka et al., further in view of Nakahara et al., and claims 10 and 12 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kodera et al. in view of Hadoka et al. and Shiraishi, and further in view of Nakahara et al. These rejections are respectfully traversed for the following reasons.

Independent claim 1, as amended, incorporates the features of dependent claims 2 and 14 as previously presented. Therefore, the scope of claim 1, as amended, is the same as previous

dependent claim 14. Claim 14 previously was rejected over Kodera et al. in view of Hadoka et al., further in view of Shiraishi. Applicants respectfully traverse this rejection. Claim 1, as amended, recites, in part, the steps of:

...forming at least first cutting lines on each of the first and second mother substrates, the first cutting lines corresponding to a boundary of the first liquid crystal display panel unit, *wherein the first cutting lines extend over at least one sealant pattern...*; and

separating the first and second liquid crystal display panel units into individual liquid crystal display panels...wherein the first and second mother substrates include a plurality of dummy glass substrates including main dummy glass substrates and secondary dummy glass substrates and *at least one of the sealant patterns under the first cutting lines binds the main dummy glass substrates and secondary dummy glass substrates together during the separating step* (emphasis added).

Kodera et al., Hadoka et al., and Shiraishi, whether taken individually or in combination, fail to teach such steps. The final Office Action alleges that Kodera et al. teaches “forming at least first cutting lines on each of the first and second mother substrates, the first cutting lines corresponding to a boundary of the first liquid crystal display panel unit, wherein the first cutting lines extend over at least one sealant pattern” by pointing to FIG. 31. (See FOA: page 3, 2nd paragraph.) It appears that the Office Action is referring to the first scribing groove 108 formed over seal 106 at the liquid crystal injection opening 106a as the “first cutting line.” However, Applicants note that the scribing grooves 108 cuts “across” the seal 106. Further, the portion defined by scribing grooves 108 is only the first substrate layer. Thus, the seal 106 does not “bind the main dummy glass substrates and secondary dummy glass substrates together.”

The final Office Action cites to FIG. 8A and alleges that the vertical portion (between lines A and G) is the “secondary dummy glass substrate” and the bottom horizontal portion (defined by line F) as the “main dummy glass substrate.” (See FOA: page 7, bottom figure.) The final Office Action then concludes that since Shiraishi teaches “sealant pattern 2 is adhesive under the first cutting lines, and the sealant pattern 2 is formed along the main dummy glass substrates and secondary dummy glass substrates, it is obvious that the sealant pattern 2 binds the main dummy glass substrates and secondary dummy glass substrates together during the separating step.” Applicants respectfully disagree. Claim 1 recites, in part, that “at least one of the sealant patterns *under the first cutting lines* binds the main dummy glass substrates and secondary dummy glass substrates together during the separating step.” In FIG. 8A of Shiraishi, the seal under the cutting line F (which is horizontal) cannot bind the vertical portion (i.e., portion between lines A and G) to the horizontal portion during the separating process. The seal 2 is an insulating seal that follows the contour of the LCD panel. Therefore, there is no seal as shown in FIG. 8A that binds the horizontal portion construed as the “main dummy glass substrate” to the vertical portion construed as the “secondary dummy glass substrate.” It is also noted that the horizontal portion and the vertical portions are broken off at separate times. Hence, the sealant pattern of Shiraishi does not bind the horizontal and vertical pieces together during the separating step.

Hakoda, cited for the first time in the final Office Action, only teaches forming different sizes of LCD panels on a substrate. Therefore, Hakoda fails to cure the deficiencies of Kodera et

al. and Shiraishi as explained above. For at least these reasons, Applicants respectfully assert that Kodera et al., Hadoka et al., and Shiraishi, whether taken individually or in combination, fail to render claim 1 unpatentable and respectfully requests that the rejection be withdrawn.

Independent claim 8, as amended, incorporates the features of dependent claim 15 as previously presented. Like claim 1, claim 8 now recites “at least one of the sealant patterns *under the first cutting lines* bind the main dummy glass substrates and secondary dummy glass substrates together during the separating step.” As explained above, Applicants respectfully assert that Kodera et al., Hadoka et al., and Shiraishi, whether taken individually or in combination, fail to teach such as feature. In addition, claim 8, as amended, recites the step of:

...separating the first and second liquid crystal display panel units into individual liquid crystal display panel units having different sizes, wherein *remnants* of the separated mother substrates include main dummy glass substrates and secondary dummy glass substrates divided by the first cutting lines, and at least one of the sealant patterns is located underneath the first cutting lines between the main dummy glass substrates and the secondary dummy glass substrates (emphasis added).”

As explained above, the alleged “main” and “secondary” dummy glass substrates construed by the Office Action in FIG. 8A of Shiraishi does not teach such as feature as the alleged main (horizontal) dummy glass substrate would be broken off at a different time than the alleged secondary (vertical) dummy glass substrate. Furthermore, there simply is no disclosure in the applied references of a sealant pattern “located underneath the first cutting lines between the main dummy glass substrates and the secondary dummy glass substrates” as recited in claim 8. For at least these reasons, Applicants respectfully assert that Kodera et al., Hadoka et al., and

Shiraishi, whether taken individually or in combination, fail to render claim 8 unpatentable and respectfully request that the rejection be withdrawn.

Dependent claims 3-7, 9-13 depend from their corresponding base claims 1 and 8. Nakahara et al. was only relied upon as teaching various sizes of the dummy glass substrates. Moreover, Nakahara et al. does not cure the deficiencies of Kodera et al., Hadoka et al., and Shiraishi as explained above. Hence, Applicants respectfully assert that Kodera et al., Hadoka et al., Shiraishi, and Nakahara et al., whether taken alone or in combination, teach or even suggest the features claimed. Therefore, Applicants respectfully request that the §103 rejections be withdrawn.

New Claims

New claims 16 and 17 have been added to more fully recite what the Applicants regard as the invention. No new matter has been entered as these claims are supported by Figures 5, 7A, and 7B as originally filed. The new independent claim 16 recites, in part, the steps of:

...forming at least a first set of cutting lines generally in the first direction on each of the first and second substrates, *the first set of cutting lines spanning the entire width of the first and second substrates* and corresponding to a boundary of the first liquid crystal display panel unit, wherein the first set of cutting lines extend directly over at least one sealant pattern;

forming at least a second set of cutting lines generally in the first direction on each of the first and second mother substrates, *the second set of cutting lines spanning only a portion of the first and second substrates* and corresponding to a boundary of the second liquid crystal display panel; and

separating the first and second liquid crystal display panel units into individual liquid crystal display panels, wherein remnants of the first and second

substrates include at least one main dummy glass substrate and at least one secondary dummy glass substrate, and at least one of the *sealant patterns under the first set of cutting lines binds* the main dummy glass substrate and secondary dummy glass substrate together during the separating step (emphasis added).

Kodera et al., Nakahara et al. and Shiraishi teach *all* of the cutting lines spanning the entire width of the substrates. Furthermore, none of the prior art of record teach “at least one of the *sealant patterns under the first set of cutting lines binds* the main dummy glass substrate and secondary dummy glass substrate together during the separating step” as recited in new independent claim 16. New claim 17 depends from independent claim 16. Furthermore, new claim 17 recites that “the first liquid crystal display panel unit is larger than the second crystal display panel unit, *the main dummy glass substrate and the secondary dummy glass substrate being formed between a plurality of second crystal display panel units* (emphasis added).” None of the prior art of record teach such a feature. Hence, Applicants respectfully assert that new claims 16 and 17 are allowable over the prior art of record.

CONCLUSION

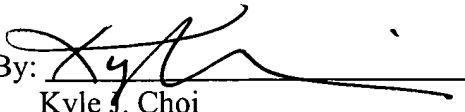
In view of the foregoing, Applicants respectfully request reconsideration and the timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of the response, the Examiner is invited to contact the Applicants’ undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under

37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,
MORGAN, LEWIS & BOCKIUS LLP

Dated: December 8, 2005

By: 
Kyle J. Choi
Reg. No. 41,480

Customer No. 009629
MORGAN, LEWIS & BOCKIUS LLP
1111 Pennsylvania Ave, NW
Washington, D.C. 20004
Telephone: 202-739-3000
Facsimile: 202-739-3001